

CLAIMS

The invention is claimed as follows:

1. An ocular stimulation device, comprising a contact lens with a member embedded in a surface thereof for electrically stimulating an eye of a wearer of the lens.
2. The device of claim 1 wherein the member comprises a substrate that generates an electrical current to an eye in response to electromagnetic radiation or an inductance effect.
3. The device of claim 2, wherein the substrate generates an electrical current to an eye in response to exposure of the substrate to electromagnetic radiation in the near infrared spectrum.
4. The device of claim 3 wherein the substrate generates an electrical current in an eye in response to exposure to electromagnetic radiation in a wavelength from about 880 nm to about 940 nm.
5. The device of claim 2 comprising a plurality of substrates on the lens arranged in a shunt manner.
6. The device of claim 2 comprising a plurality of substrates on the lens arranged in a combination of a parallel manner and a shunt manner.
7. The device of claim 2 wherein the substrates is a photodiode.
8. The device of claim 2 wherein the substrate is a phototransistor.
9. The device of claim 2 wherein the substrate is a solar cell.
10. The device of claim 2 wherein the substrate is a photoconductive element.
11. The device of claim 2 wherein the substrate provides anodic stimulation.
12. The device of claim 1 wherein the substrate provides cathodic stimulation.
13. The device of claim 1 wherein the substrate provides anodic and cathodic stimulation to the ocular system.
14. The device of claim 1, further comprising stimulating eye glasses.

15. The device of claim 14 wherein the stimulating eye glasses have lenses that filter infrared light.

16. The device of claim 14 wherein the stimulating eye glasses have one or more light emitting diodes associated therewith.

17. The device of claim 16 wherein the one or more light emitting diodes emits electromagnetic radiation in the near infrared or infrared wavelengths.

18. The device of claim 17, wherein a first one or more light emitting diodes emits electromagnetic radiation at a first wavelength, and a second one or more light emitting diodes emits electromagnetic radiation at a second wavelength different from the first wavelength.

19. The device of claim 18 wherein the first one or more light emitting diodes emits light at about 880 nm, and the second one or more light emitting diodes emits light at about 940 nm.

20. The device of claim 1 wherein the member includes a stimulating electrode and a return electrode.

21. The device of claim 1 wherein the stimulating electrode are generally centrally disposed on the lens.

22. The device of claim 21 wherein the stimulating electrode comprises two arcuate-shaped electrodes.